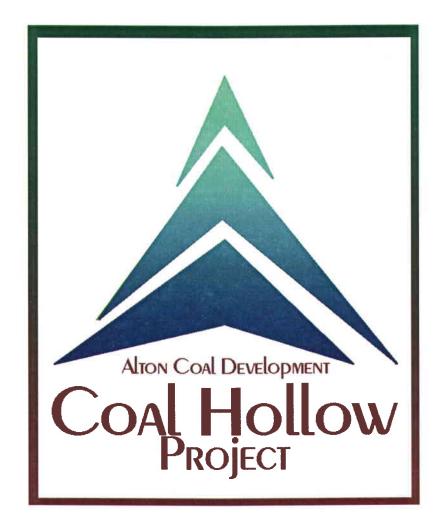
# Alton Coal Development, LLC

# **Coal Hollow Project**

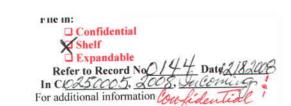
# **Mining and Reclamation Plan Technical Review - Revisions**



December 2008

Chapters 4 and 5

C/025/0005



The following pages replace the Table of Contents in Chapter 4, Volume 2. This Table of Contents has been revised to include Appendix 4-5 for the Fugitive Dust Control Plan (FDCP) and to also include revisions to the text in Chapter 4 that have been revised to include the FDCP.

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R645-301-400

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**R645-301-423 et seq,** The Applicant refers to pages 8-10 of the NOI, Limitations and Test Procedures, (Appendix 4-2) for compliance with R645-301-423, the air pollution control plan, and R645-301-423.100, the air quality monitoring program to evaluate the effectiveness of the fugitive dust control practices proposed and R645-301-423.200, the plan for fugitive dust control practices. This is unacceptable, because, the NOI does not require regular monitoring of visible emissions by the Applicant. The NOI and the Air Quality Approval Order are tools used by the DAQ to promote compliance with the Clean Air Act. The terms of the NOI are monitored by the DAQ and enforced by the DAQ. Since the monitoring and evaluation requirements of R645-301-423 et seq, for surface mines producing greater than 1,000,000 tons/year will be enforced by the Division, the monitoring and evaluation plan must be clearly stated in the permit application, with the results provided in the Annual Report, and available to the Division inspectors. The monitoring and evaluation plan should include provisions for monitoring and controlling fugitive dust and coal fine deposition by the Applicant to control pollution attendant to erosion (R645-301-244.100) and to protect water quality (R645-301-526.221 and 526.222) from the open stockpiles of overburden, from coal stockpiles, from crushers, screens, conveyor transfer and drop points. The plan should indicate that the monitoring information and accompanying summary evaluation of emissions will be provided in the Annual Report, and be available to the Division inspectors upon request

The following page replaces 4-10 and 4-11 in Chapter 4, Volume 2. These pages have been modified by removing text detailing dust control measures and instead references Appendix 4-5 which contains a Fugitive Dust Control Plan for the Coal Hollow Mine.

### 413.300. Criteria for Alternative Postmining Land Uses

Other than improvements to the existing land described above, the land will be returned to its pre-mining conditions.

### **420 AIR QUALITY**

#### 421 CLEAN AIR ACT

Coal mining and reclamation operations will be conducted in compliance with the requirements for the Clean Air Act and Any other applicable Utah or Federal statutes and regulations containing air quality standards.

### **422 UTAH BUREAU OF AIR QUALITY**

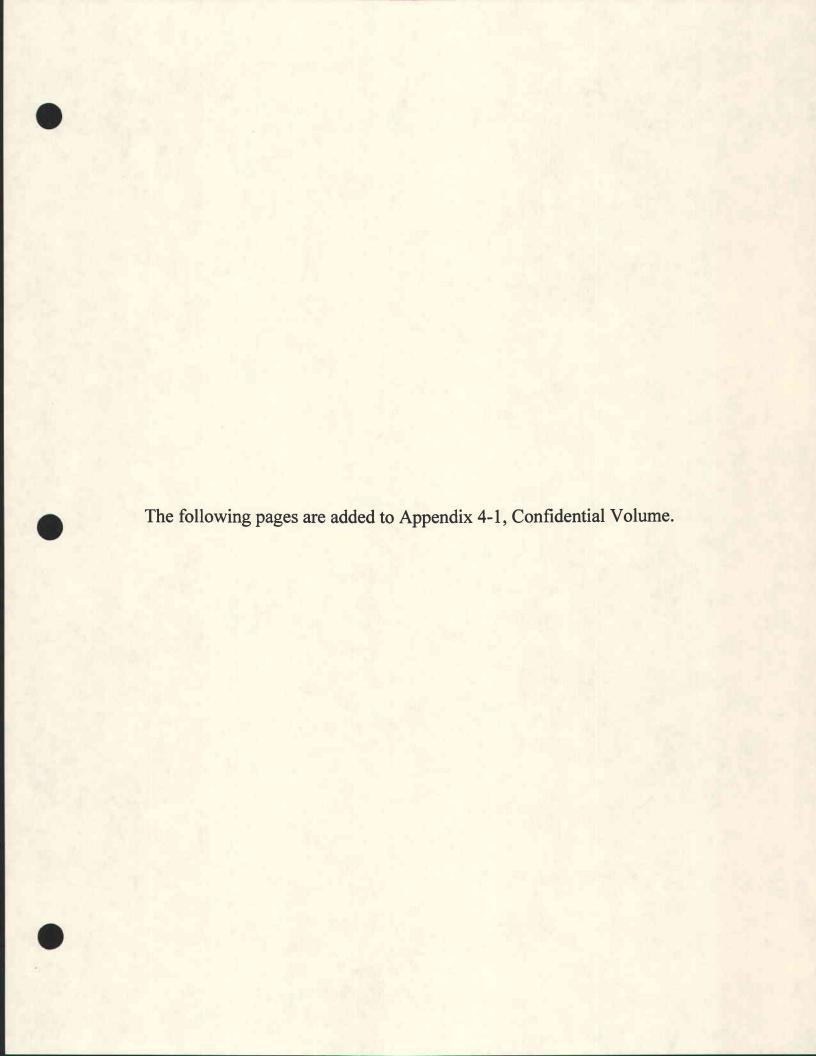
Alton Coal Development, LLC has retained JBR Environmental Consultants to prepare a Notice of Intent (NOI) for a new source at the Coal Hollow Project. The application has been completed and was submitted on May 8, 2007. JBR coordinated preparation of the original NOI with Tom Bradley and Jon Black of the Utah Division of Air Quality. Upon approval of the NOI, the Executive Secretary of the Utah Air Quality Board will issue an Approval Order for a new source.

#### 423.100-200 AIR POLLUTION CONTROL PLAN

Production rates at the Coal Hollow Mine are expected to exceed 1,000,000 tons of coal per year. Appendix 4-5 provides a Fugitive Dust Control Plan (FDCP). This plan includes controls and monitoring measures that will be taken to minimize air pollution related specifically to fugitive dust. The revised Notice of Intent provided as Appendix 4-2 provides site specific air dispersion modeling, controls and monitoring for air pollutants not included in the FDCP.

#### 424 PLAN FOR FUGITIVE DUST CONTROL PRACTICES

Proposed mining will exceed 1,000,000 tons annually. A Fugitive Dust Control Plan is provided as Appendix 4-5.



**R645-301-423 et seq.** The Applicant refers to pages 8 – 10 of the NOI, Limitations and Test Procedures, (Appendix 4-2) for compliance with R645-301-423, the air pollution control plan, and R645-301-423.100, the air quality monitoring program to evaluate the effectiveness of the fugitive dust control practices proposed and R645-301-423.200, the plan for fugitive dust control practices. This is unacceptable, because, the NOI does not require regular monitoring of visible emissions by the Applicant. The NOI and the Air Quality Approval Order are tools used by the DAQ to promote compliance with the Clean Air Act. The terms of the NOI are monitored by the DAQ and enforced by the DAQ. Since the monitoring and evaluation requirements of R645-301-423 et seg, for surface mines producing greater than 1,000,000 tons/year will be enforced by the Division, the monitoring and evaluation plan must be clearly stated in the permit application, with the results provided in the Annual Report, and available to the Division inspectors. The monitoring and evaluation plan should include provisions for monitoring and controlling fugitive dust and coal fine deposition by the Applicant to control pollution attendant to erosion (R645-301-244.100) and to protect water quality (R645-301-526.221 and 526.222) from the open stockpiles of overburden, from coal stockpiles, from crushers, screens, conveyor transfer and drop points. The plan should indicate that the monitoring information and accompanying summary evaluation of emissions will be provided in the Annual Report, and be available to the Division inspectors upon request

The following Fugitive Dust Control Plan is added as Appendix 4-5 in Chapter 4, Volume 2. This plan is submitted to address air quality monitoring and fugitive dust control practices as required in R645-301-423 and 424.

# **APPENDIX 4-5**

Fugitive Dust Control Plan

By: Alton Coal Development, LLC and JBR Environmental Consultants

# ALTON COAL DEVELOPMENT, LLC

463 NORTH 100 WEST, SUITE 1 (435) 867-5331

Fugitive Dust Control Plan

For

Coal Hollow Project

Located In:

T39S, R5W, Sections 19, 20, 29 and 30, southeast of Alton in Kane County, UT

for questions regarding this plan contact

Chris McCourt

at

(435) 867-5331

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### I. Introduction

Alton Coal Development, LLC (Alton) intends to excavate and process coal from its Coal Hollow Mine Site, located south-southeast of Alton, UT. A Notice of Intent has been filed with the Utah Department of Environmental Quality, Division of Air Quality (UDAQ). Typical operations will include excavation, hauling, sizing and stockpiling the coal. The intent of this Fugitive Dust Control Plan (FDCP) is to outline Alton's plan to control fugitive dust during coal mining operations.

# II. Regulatory Applicability

Although the Coal Hollow Mine is not subject to the requirements of UAC R307-309, Non-attainment and Maintenance Areas for PM10: Fugitive Emissions and Fugitive Dust, as it is not in a non-attainment area or maintenance area, the mine is subject o R307-205, Emission Standards: Fugitive Emissions and Fugitive Dust. The purpose of R307-205 is to establish minimum work practices and emission standards for sources of fugitive emissions and fugitive dust located in all areas of the state, except those listed in the state implementation plan or non-attainment areas (UAC R307-205-1). While R307-205 does not require the implementation of a FDCP, Alton has prepared this FDCP to ensure the requirements of R307-205 are met.

The UAC R307-309-2 defines material as "sand, gravel, soil, minerals, other matter that may create fugitive dust." For this FDCP, material is used and defined in the same way. The following activities of concern to the UDAQ, will take place:

YES	NO	ACTIVITY
<b>✓</b>		Storage, hauling or handling operations of material
<b>✓</b>		Clearing or leveling of land one-quarter acre or greater in size
<b>✓</b>		Earthmoving, excavation, or movement of trucks or construction equipment over cleared land one-quarter acre size or greater
<b>✓</b>		Haul road access and activity
	✓	Engaging in demolition activities including razing homes, buildings or other structures

Alton recognizes that in some cases, an approval order or temporary relocation permit will be required for the project, especially in cases of equipment use such as crushers or screens. This document in no way releases Alton from the requirements of air quality permits.

### III. Source Information

The section supplies the site specific information regarding the project. Although not required by the UAC, the Utah Division of Air Quality (UDAQ) suggests the FDCP contain the following source specific information. Therefore, the information provided in this section is not to be used for

determining compliance with any applicable permits, rather to give an overall understanding of the project for fugitive dust applications only.

	SOURCE INFORMATION
Name of Operation:	Alton Coal Development, LLC – Coal Hollow Mine
Address or Approximate Location:	T39S, R95W, Sections 19, 20, 29 and 30, South-southeast of Alton in Kane County, UT
Approximate Length of Project:	5 years
Description of Process or Activity:	Preparing site for mining operations including installation of buildings, haul roads and sizing/stockpiling equipment. Conducting coal mining operations including clearing topsoil, overburden removal, excavation of coal, and sizing, sorting and stockpiling coal.
Type of Material Processed or Disturbed:	Topsoil and vegetation temporarily removed (will be replaced and revegetated).  Vegetation, topsoil, overburden, coal
Amount of Material Processed or Disturbed:	Approximately 240 acres of land will be cleared of topsoil and overburden to allow for excavation of coal. Approximately 193 acres will be cleared of topsoil to allow placement of support buildings and sizing and stockpiling operations, as well as construction of haul roads, sediment ponds, spoil placement and subsoil/topsoil stockpiles

In all cases, the responsible parties for fugitive dust control are the owner and/or operator.

Attachment 1 identifies the owner and operators of this project, and the contact information of the individuals responsible for implementation and maintenance of the FDCP.

In addition, all subcontractors who may be active on the project have will be required to enter into an agreement of shared responsibility regarding fugitive dust control. Attachment 2 provides the form which would identify subcontractors and the duration of subcontractor activity on the project. Also included in Attachment 2 is a signed acknowledgement that would be provided for each subcontracting company. Included in that acknowledgement is: awareness of the FDCP, intent to comply with the FDCP, obligation of reporting to the owner and/or operator any problems with fugitive dust control, and shared responsibility of any fines incurred from subcontractor negligence regarding fugitive dust control.

# IV. Fugitive Dust Emission Activities

The section fulfills the requirements set for the UAC R307-309-6(1)(a)-(k), by further addressing the specific project activities generating fugitive dust.

ACTIVITY	YES	NO	ACTIVITY DETAILS
MATERIAL STORAGE	<b>✓</b>		List the type of material, how many storage piles and area used for storage piles.  Initially, topsoil will be removed from the facility area and stockpiled. Also topsoil and subsoil from the initial coal pits will be salvaged and stored in the east of the mining area. As mining progresses, topsoil and overburden from one pit will be direct hauled to reclamation areas, when practical. Any topsoil piles that exist for at least 1 year will be stabilized by sloping to a 3:1, reseeding and mulching. Piles that exist for less than 1 year will be coated with a tackifier at the manufacturer's suggested rate for dust control applications.  There is one coal stockpile planned that is expected to contain approximately 50,000 ton.
MATERIAL HANDLING, TRANSFER, HAULING LOADING, OR DUMPING	<b>✓</b>		List the type of material that will be handled, transferred, loaded, hauled and/or dumped and the equipment that will be used for these activities.  Topsoil will be handled with loaders, dozers, trucks and/or graders.  Overburden will be handled with loaders, excavators and trucks.  Coal will be handled with loaders, excavators, trucks, conveyors, screens, and crushers.
HAUL ROADS, ROADWAYS, OR YARD AREAS	<b>✓</b>		List vehicles, equipment, and frequency of driving on the haul roads, roadways, or yard areas. List approximate lengths of road or areas these items will take up.  There will be two sets of roads at the site, coal haul roads and overburden haul roads. The majority of the coal haul roads will be mostly long term and centrally located at the site. The maximum length will be approximately 7900'. 80 to 100 ton haul trucks will be the primary vehicles on these roads.

			Overburden haul roads will be located near the pits and location and length will be constantly changing as mining progresses. 150 to 250 ton haul trucks will be the primary vehicles on the overburden haul roads.  All haul roads will have marked speed limit of 25 mph and either watering or chemical suppressant
	CLEARING, LEVELING,	✓	dust control.  List the acreage of land being cleared or leveled.  Approximately 433 acres will be cleared for mining and sizing/stockpiling activities.
	EARTH MOVING, EXCAVATION	✓	List the areas of earthmoving, excavation or trenching.  The coal pit areas, storage piles, roads, ditches and sediment pond locations.
	CONSTRUCTION, DEMOLITION	<b>✓</b>	List the structures that will be demolished or constructed and the areas associated with those activities.  Several temporary buildings will be constructed in the processing area, in the northern portion of the site. These buildings include the South Control Room, Wash Bay, Shop, Oil Storage, and Office.
	DRILLING, BLASTING, PUSHING OPERATIONS	<b>✓</b>	List frequency of drilling blasting and pushing operations, (hours per day, days per week, weeks per year).  Operations will occur up to 24 hr/day, 6 days per week, 52 weeks per year
)	MATERIAL PROCESSING**	✓	Will any material be made or altered during the project? For example, crushing, screening, concrete production? Explain any material processing activities that will take place.  The sizing and sorting operation involves crushing/breaking, screening, conveying, and stockpiling. Material is extracted at the mine using hydraulic excavators and delivered to the processing plant by haul trucks. The material is sized by a feeder breaker which is a round shaft

		with bits attached that spin across the coal to break the coal. One conveyor transfers the broken up coal to the roll crusher and from the roll crusher to the stacker belt and into the stockpile.
OTHER	<b>✓</b>	Reclamation areas that have topsoil applied during a season not suitable for seeding will have tackifier applied for dust control measures. During the appropriate season for seeding, all newly reclaimed areas will then be seeded and mulched.

<sup>\*\*</sup>Material processing may require an approval order or other air permit. If applicable, the appropriate permits are in Attachment 3.

### V. Fugitive Dust Controls

There are various aspects of fugitive dust control that must be addressed

- Road Activity Fugitive Dust Control
- Activity Specific On-Site Fugitive Dust Control
- Off-Site Fugitive Dust Control

### i. Road Activity – Fugitive Dust Control

The following are requirements, specific to road use that must be implemented during all projects, as indicated by the UAC. The UAC specifically identify activities that require prompt mitigation for control of fugitive dust. Due to the nature of Alton's business, these activities will always apply to a project; therefore, these techniques will be implemented for duration the project.

### UAC R307-309-7. Storage, Hauling, and Handling of Coal and Overburden.

Any person owing, operating or maintaining a new or existing material storage, handling, or hauling operation shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

#### UAC R307-309-7. Construction and Demolition Activities.

Any person engaging in clearing or leveling of land with an area of one-quarter acre or more, earthmoving, excavating, construction, demolition, or moving trucks or construction equipment over cleared land or access haul roads, shall prevent, to the maximum extent possible, material from being deposited onto any paved road other than a designated deposit site. Any such person who deposits materials that may create fugitive dust on a public or private paved road shall clean the road promptly.

#### UAC R307-309-9. Roads.

- (1) Any person responsible for construction or maintenance of any existing road or having right-of-way easement or possessing the right to use the same whose activities results in fugitive dust from the road shall minimize fugitive dust to the maximum extent possible. Any such person who deposits material that may create fugitive dust on a public or private paved road shall clean the road promptly.
- (2) Unpaved Roads. Any person responsible for construction or maintenance of any new or existing paved road shall prevent, to the maximum extent possible, the deposit of material from the unpaved road onto any intersecting paved road during construction or maintenance. Any person who deposits material that may create fugitive dust on a public or private paved road shall clean the road promptly.

### ii. Activity Specific On-Site Fugitive Dust Control

For each activity that was described in *IV. Fugitive Dust Emission Activities*, a control strategy or strategies are listed. The strategies are listed in a staged approach, meaning that if the first approach of control, Stage 1, is not satisfactory, then the next approach of control, Stage 2 will be attempted. Stage 3 is the final stage. If Stage 3 is unsuccessful in mitigating fugitive dust, this plan requires ceasing operation to control fugitive dust.

It is the owner/operator's responsibility to ensure that each of these control strategies are implemented and maintained on-site and that all subcontractors are aware of their obligation regarding these control strategies. Additional space has intentionally been included to allow the site supervisor to include any additional control strategies at each stage.

ACTIVITY		CONTROL STRATEGY
ACTIVITY		
	Stage 1:	Either seeding and mulch or tackifier application for topsoil and subsoil.
		Coal: Inherent moisture with water sprays as needed.
MATERIAL STORAGE	Stage 2:	Toposoil/Subsoil: Increase rate of tackifier application until fugitive dust is controlled.  Coal: Increase use of water sprays until fugitive dust is
		controlled.
	Stage 3:	Topsoil/Subsoil and Coal: Minimize or reduce operations.
	Stage 1:	Inherent moisture with water sprays only on an asneeded basis.
MATERIAL HANDLING, TRANSFER, HAULING LOADING, OR DUMPING	Stage 2:	Increase use of water sprays until fugitive dust is controlled.
	Stage 3:	Minimize or reduce operations.
	Stage 1:	Water sprays only on as-needed basis.
HAUL ROADS, ROADWAYS, OR YARD AREAS	Stage 2:	Increase use of water sprays until fugitive dust is controlled, apply magnesium chloride or gravel as needed.
	Stage 3:	Minimize or reduce travel on these areas.
	Stage 1:	Inherent moisture with water sprays only on an asneeded basis.
CLEARING, LEVELING,	Stage 2:	Increase use of water sprays until fugitive dust is controlled.
	Stage 3:	Minimize and reduce operations.

	Stage 1:	Inherent moisture with water sprays only on an asneeded basis.
EARTH MOVING, EXCAVATION	Stage 2:	Increase use of water sprays until fugitive dust is controlled.
	Stage 3:	Minimize or reduce operations.
	Stage 1:	Water sprays only on an as-needed basis.
CONSTRUCTION, DEMOLITION	Stage 2:	Increase use of water sprays until fugitive dust is controlled.
	Stage 3:	Minimize or reduce operations.
	Stage 1:	Perform activity when low or no wind exists, when practicable.
DRILLING, BLASTING, PUSHING OPERATIONS	Stage 2:	Use water sprays on the area where activity will occur.
	Stage 3:	Minimize or reduce operations.
	Stage 1:	Inherent moisture with water sprays only on an asneeded basis.
MATERIAL PROCESSING** includes crushing and screening type operations)	Stage 2:	Increase use of water sprays until fugitive dust is controlled.
	Stage 3:	Minimize or reduce operations.

<sup>\*\*</sup> If processing other than crushing or screening occurs, the fugitive dust controls for those operations are addressed in the "OTHER" category.

Alton will also implement an awareness level program to minimize fugitive dust due to mining activities and haul road traffic in the pit areas. The site supervisor, (or authorized representative) will periodically observe the dust throughout each shift to determine the level of control needed to minimize the dust. The following levels of awareness and control will be used:

Level  $\mathbf{0}$  – No dust present; current dust control measures are adequate.

- Level 1 Weather or production causing dust at 0-5% opacity at the permit boundary; increase dust control measures necessary. Watering frequency and application of magnesium chloride on the Out of Pit haul roads will be increased until Level 0 is reached.
- **Level 2** Weather or production causing dust at 5-10% opacity at the permit boundary; increase dust control measures necessary. Watering frequency and application of magnesium chloride on the Out of Pit haul roads will be increased until Level 0 is reached. Production reduced until evident that these measures are controlling the dust.
- **Level 3** Weather or production causing dust > 10% opacity at the permit boundary; increase dust control measures necessary. Production stopped until Level 2 is reached. Level 2 activities conducted until Level 0 is reached.

Watering records will be maintained to show the dust control measures taken. These records will be provided in the Annual Report made available to Utah Division of Oil, Gas and Mining and to the inspectors upon request.

### iii. Activity Specific Off-Site Fugitive Dust Control

Alton will control off-site of fugitive dust, which includes track-out, with the following control strategies:

OFF-SITE ACTIVITY		CONTROL STRATEGY
·	Stage 1:	Inherent moisture in material.
FUGITIVE DUST ESCAPING FROM TRUCK BEDS	Stage 2:	Use a synthetic cover for haul trucks.
	Stage 3:	Minimize or reduce operations.
	Stage 1:	Course gravel will be placed at the entrances and exits of the construction area to public roads to prevent trackout.
TRACK-OUT	Stage 2:	Use of a grader to clean the road from track-out.
	Stage 3:	Minimize or reduce operations, or wash tires.

# VI. Continuous Improvement

Alton will review this plan and activities associated with controlling the Coal Hollow site's fugitive dust at least ONCE A YEAR. Changes to the plan will occur at this time, or sooner, if necessary.

# **ATTACHMENT 1**

Responsible Parties for Fugitive Dust Control

**Responsible Parties for Fugitive Dust Control** 

OPERATOR:	Alton Coal Development, LLC
Contact Name:	Chris McCourt
Position:	Mine Manager
Phone Number:	435-867-5331
OWNER:	Alton Coal Development, LLC
OWNER:  Contact Name:	Alton Coal Development, LLC  Robert C. Nead, Jr.
	•

# **ATTACHMENT 2**

Fugitive Dust Management, Acknowledgement and Certification

# Fugitive Dust Management, Acknowledgement and Certification

Contractor:	
Contact Name:	
Position:	
Phone Number:	
Start Date on Project:	
Finish Date on Project:	
requirements of this is will instruct all employers plan to control fugition maintenance and any may be directly relativished to fug may be monetarily as	Plan, required under the Utah Administrative Code R307-309, and oyees of the Contractor on site to follow guidelines set for in the twe dust. The Contractor is equally responsible for fugitive dust fugitive dust violations from the Utah Division of Air Quality that ted to the Contractor or its employees. Any and all subsequent itive dust non-compliance that can be attributed to the Contractor sessed to the Contractor by the owner and/or operator receiving the will report any fugitive dust control non-compliance to the owner in this document.
Contractor	
Company Name (Printed	1)
Name (Printed)	
Signature	Date
Alton Coal Developme	nt, LLC
Chris McCourt Name (Printed)	
Signature	Date